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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/744,610	03/26/2001	Joergen Brosow	LZ-44PCT	1618
7590 12/02/2003			EXAMINER	
Friedrich Kueffner			KIM, AHSHIK	
317 MADISON AVENUE SUITE 910			ART UNIT	PAPER NUMBER
New York, NY 10017			2876	
			DATE MAILED: 12/02/2003	3

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	09/744,610	BROSOW, JOERGEN				
Onice Action Summary	Examiner	Art Unit				
	Ahshik Kim	2876				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  Extensions of imm may be available under the provisions of 37 CFR.11  If the period for reply specified above, the maximum statutory of the provisions of 37 CFR.12  If NO period for reply specified above, the maximum statutory of the period for reply specified above, the maximum statutory of a failure to reply with the set or extended period for reply will, by statute Any reply reviewby the fortice later than three months after the mailing aemed patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	hely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. & 133).				
1) Responsive to communication(s) filed on 11/0.	3/03 (Amendment).					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 31-39,42-44 and 46-50 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
∑ Claim(s) <u>31-39,42-44,46-50</u> is/are rejected.						
<ol> <li>Claim(s) is/are objected to.</li> </ol>						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
<ol> <li>The specification is objected to by the Examiner.</li> </ol>						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
12) ☐ Acknowledgment is made of a claim for foreigr a) ☐ All b) ☐ Some "c) ☐ None of: 1.☐ Certified copies of the priority document: 2.☐ Certified copies of the priority document: 3.☐ Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list table of the prior since a specific reference was included in the first 37 CFR 1.78. a) ☐ The translation of the foreign language pro	s have been received.  s have been received in Applicativity documents have been receive (1 (PCT Rule 17.2(a))  of the certified copies not receive opriority under 35 U.S.C. § 119(c) at sentence of the specification ovi	on No d in this National Stage d. l) (to a provisional application) in an Application Data Sheet. eived. and/or 121 since a specific				
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.						
Attachment(s)						
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)   Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)				

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#### DETAILED ACTION

#### Amendment

 Reccipt is acknowledged of the amendment filed on November 3, 2003. In the amendment, claims 31, 34-39, 42-44, 46, and 48-50 were amended. Currently, claims 31-39, 42-44 and 46-50 remain for examination.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
  - 3. Claims 31-39, 42-44, and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolpert et al. (US 6,255,948) in view of Szewczykowski (US 6,039,249).

Re claims 31-33, 35-38, 43, 47, 48, and 50, Wolpert teaches a safety/security paper 12

(see abstract) comprising a security strip 10 extending along short side of the paper (see figure 1, col. 4, lines 37+; col. 5, lines 5+). The embodiment of safety paper can include banknotes, currencies, checks, passports and other safety/security papers (col. 4, lines 50+). As shown in figures 2-3C, the security paper is comprised of a polymeric carrier layer 14 and a metallic substrate 20 (col. 5, lines 22+), and an additional coating layer or laminate 24 can also be contemplated (col. 6, lines 28+).

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Wolpert fails to specifically teach or fairly suggest that the security structure is an clectronic circuit communicating with host machine in contactless manner.

Szewczykowski teaches a safety/security paper in the form of a negotiable instrument comprising an RF-ID tag (see abstract; col. 2, lines 65+) to provide authentication function and therefore thwart counterfeiting effort. RF-ID tag contains one or more integrated circuits pressed, stamped or etched to form a thin layer, and when communicating with the host, the tag/antenna receives power and signal from the host and transmits response to the host. It is also disclosed in Szewczykowski (see abstract) that the RF-ID tag can be used alternatively or in addition to a magnetic strip on the instrument.

In view of Szewczykowski's s teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known radio frequency identification (RF-ID) tag to the teachings of Wolpert in order to improve data storage capacity and add remote I/O capability. RF-ID tag, in general, provides more data storage area for information to be stored and retrieved compared to a magnetic strip. Moreover, data stored in 15 RF-ID tag can be remotely read and updated by the reader, and the tag on the instrument functions as an antenna sending and receiving the data. Such contactless I/O provides significant advantage in checking authenticity of an item since one does not have to take the item to the reader, and un-authorized person(s) may not aware that the items are being checked. Accordingly, such modification would have been an obvious extension considered by one ordinary skill in the art, and therefore an obvious expedient.

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Re claim 34, as shown in figure 5, the reader reads characteristic information from the device 10, and compares it against the predetermined pattern and determines authenticity (col. 7, lines 55+).

Re claim 39, the sccurity feature is embedded between carrier layer and a covering layer 5 (see figure 3A).

Re claim 42, although Wolpert is silent about expansion coefficient of various materials make up the security paper, it would have been obvious to one of ordinary skill in the art to use materials sharing common characteristics/parameters, as it would only make common industrial sense for the pattern and paper layer to have similar expansive properties, so as to prevent the pattern from separating from the paper layer during a heating process. For example, if the currency were in a very hot environment, without similar expansive properties, the paper layer may expand at a faster rate than the pattern, causing the pattern to be damaged or "fall off" the currency.

Re claims 44 and 46, Wolpert further discloses that one or more security devices 10 can be installed in various locations, and the paper can be read in all directions (i.e., upside down or right side up, etc.) suggesting that location information is taken into account in identifying the security devices 10.

Re claim 49, although not explicitly suggested, location of security device 10 can be considered a design variation element in that some would choose to locate them in easily visible area of the paper, as a warning and try to prevent any unauthorized acts. Some may have them in obscure location in the paper, and put emphasis on catching people who are willing to tamper

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papers. Accordingly, it is Examiner's view that location of the device alone, since other elements are already taught by Wolpert in view of Szewczykowski, would not be patentable.

## Response to Arguments

 Applicant's arguments filed on November 3, 2003 have been carefully reviewed and considered, but they are not persuasive.

Applicant argues that it is unobvious to combine the cited references (to Wolpert and Szewczykowski), and the combined teachings of Wolpert and Szewczykowski does not suggest the claimed subject matter disclosed in the instant application.

Examiner respectfully disagrees with Applicant's assertion in following grounds:

Wolpert teaches a multiple security features used with an item, such as a secure document.

Wolpert reference provides a thin strip 10, which is identical to the conductor strip (50, 50°). On the strip 10, various indicia or marking 16 can be applied (see figures 1-4A). Various markings are sandwiched/insulated between the base layer 14 and covering resins 22 (col. 5, lines 55+).

The carrier substrate is made of a polyester, polyvinyl carbonate or polypropylene film on paper (col. 5, lines 22+). In view of the above, most of the structural features allegedly lack in Szewczykowski (d, e, f, g of claim 31) raised by the Applicant (see page 12, first paragraph thereafter in remarks) is in fact found in Wolpert reference. Applicant is reminded that Szewczykowski reference was relied on for RF ID chip embedded in the security paper, not the structure of the security paper.

Examiner agrees with Applicant in that Szewczykowski patent does not explicitly point out "the circuits being pressed, stamped or etched to form a thin layer". However, the Examiner

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directs the Applicants' attention to the embodiment of Szewczykowski patent, which is a negotiable instrument. The field of invention (col. 1, lines 11+) recites authentication of a negotiable instrument such as a note, or a U.S. Treasury note to detect whether the note is a counterfeit or not. Considering such embodiment, it is obvious (the Examiner might go so far as to consider inherent) that the note should contain RFID chip that is not considerably thicker than the note. The methods mentioned above are some of the well-know methods of embedding the chip in a thin layer.

For the reasons stated above, the Examiner believes Wolf in view of Szewczykowski teaches the presently claimed invention in the instant application.

The amended claims and the Applicant's remarks describing these elements have been fully considered, but they are not persuasive, and therefore, the Examiner has made this Office Action final.

### Conclusion

15 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (703)305-5203. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (703) 746-4782. The fax phone number for this Group is (703)872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Ahshik Kim
25 Patent Examiner
Art Unit 2876
November 25, 2003

MICHAEL G. LEE PERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800